



United Nations

Mortality Risk Index

Which populations are most and least at risk from earthquakes, floods, tropical cyclones and landslides

Country/Territory Name	MRI multi	MRI multi absolute	MRI multi relative	Tropical Cyclones	Tropical Cyclones abs.	Tropical Cyclones rel.	Earthquakes	Earthquakes absolute	Earthquakes relative	Floods	Floods absolute	Floods relative	Landslides	Landslides absolute	Landslides relative
Marshall Islands	3	1	5	3	1	5									
Netherlands	3	3	3	0	0	0	0	0	0	3	3	3			
Norway	3	2	3	0	0	0							3	3	3
Saudi Arabia	3	3	2	0	0	0	2	2	2	3	3	2			
U.K. of Great Britain and Northern Ireland	3	4	2	0	0	0	0	0	0	3	3	2	2	3	1
United States Virgin Islands	3	1	5	3	1	5	0	0	0						
American Samoa	2	1	3	2	1	3									
Dhekelia and Akrotiri SBA	2	1	2	0	0	0	1	0	2						
French Polynesia	2	1	3	2	1	3									
Kuwait	2	1	3	0	0	0	0	0	0	2	1	3			
Martinique	2	1	3	2	1	3	0	0	0				0	0	0
Oman	2	1	2										3	3	2
Palestinian Occ. Territories	2	2	2	0	0	0	2	2	2						
Sweden	2	2	2	0	0	0	0	0	0	2	2	2			
Greenland	1	1	1	0	0	0	0	0	0						
Wallis and Futuna	1	1	1	0	0	0	0	0	0						
Bahrain	0	0	0	0	0	0									
Denmark	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Estonia	0	0	0	0	0	0									
Finland	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Isle of Man	0	0	0	0	0	0									
Latvia	0	0	0	0	0	0									
Mayotte	0	0	0	0	0	0									
Norfolk Island	0	0	0	0	0	0									
Qatar	0	0	0	0	0	0									
Saint Pierre et Miquelon	0	0	0	0	0	0									
Seychelles	0	0	0	0	0	0									
United Arab Emirates	0	0	0	0	0	0							0	0	0
Aruba															
Cocos (Keeling) Islands															
Grenada															
Macau															
Niue															
Réunion															
Tokelau															
Turks and Caicos islands															
Tuvalu															

Mortality Risk Index legend

Blank: missing data 1: Negligible 3: Low 5: Medium 7: High 9: Major
 0: Unknown exposure 2: Very low 4: Medium Low 6: Medium high 8: Very high 10: Extreme

In this table, countries are classified using the MRI multi. Within each category, the territories are classified by alphabetical order.

The Mortality Risk Index (MRI) is based on a significant effort in modelling hazards (tropical cyclones, floods, earthquakes and landslides) in both frequency and severity, human exposure and identification of their vulnerability (see the 2009 Global Assessment Report for details).

The MRI comprises three main components:

- 1) Absolute MRI provides classes of average number of fatalities per year (as modelled).
- 2) Relative MRI, provides classes of average number of fatalities in proportion of national population (as modelled).
- 3) Multi MRI is the average of the absolute and relative elements.

Limitations:

The main limitation of this index is the lack of information on droughts. Droughts were studied and were supposed to be included, however, it appears that droughts are a much more complex type of hazard often linked with political situation - civil unrest and conflict, for instance - than meteorological conditions. The model achieved for drought for this study was not at the same level of the other and prevent from including it in the index. As a consequence, information presented on Africa is unbalanced and countries like Ethiopia, Somalia, Sudan, Mali, Mozambique and Madagascar would appear in the higher risk categories with drought included.

This index was developed using global datasets and although these are becoming more accurate, their application at the local level may not be fully precise. This is particularly true for small islands and small countries.

Source: Global Assessment Report: Risk and Poverty in a Changing Climate

Country/Territory Name	MRI multi	MRI multi absolute	MRI multi relative	Tropical Cyclones	Tropical Cyclones abs.	Tropical Cyclones rel.	Earthquakes	Earthquakes absolute	Earthquakes relative	Floods	Floods absolute	Floods relative	Landslides	Landslides absolute	Landslides relative
Bangladesh	9	10	7	9	10	7	2	3	1	7	8	5	4	5	2
China	9	10	7	4	6	2	9	10	7	6	8	4	4	6	2
Colombia	9	9	8	0	0	0	9	9	8	5	5	4	5	5	4
India	9	10	7	6	8	4	9	10	7	8	10	5	4	6	2
Indonesia	9	10	7	0	0	0	9	10	7	5	6	3	5	6	4
Myanmar	9	9	8	6	6	5	9	9	8	6	6	5	5	6	4
Afghanistan	8	8	7	0	0	0	8	8	7	6	6	5	4	4	3
Guatemala	8	8	8	2	2	2	8	8	8	4	4	3	6	6	5
Iran (Islamic Republic of)	8	8	7	0	0	0	8	8	7	5	6	4	3	4	2
Pakistan	8	9	6	3	4	2	8	9	6	5	6	4	4	5	3
Peru	8	8	7	0	0	0	8	8	7	4	4	3	5	5	4
Philippines	8	8	7	7	8	5	7	8	6	4	5	3	5	6	4
Romania	8	8	7	0	0	0	8	8	7	4	4	4	3	3	2
Uzbekistan	8	8	7	0	0	0	8	8	7	5	5	4	2	3	1
Albania	7	6	7	0	0	0	6	6	6	4	3	4	5	4	5
Algeria	7	8	6				7	8	6	5	5	4	4	4	3
Armenia	7	6	7	0	0	0	7	6	7	5	4	5	4	3	4
Comoros	7	5	8										7	5	8
Costa Rica	7	6	7	2	1	2	7	6	7	3	2	3	5	4	5
Democratic Republic of the Congo	7	8	6	0	0	0	7	8	6	5	6	4	0	0	0
Dominican Republic	7	6	7	6	6	6	5	5	5	4	4	4	4	4	4
Ecuador	7	7	7				7	7	7	4	4	4	5	5	4
El Salvador	7	7	7				7	7	7	3	3	3	5	5	5
Japan	7	8	5	5	6	3	6	7	5	4	5	2	4	5	2
Taiwan (Province of China)	7	7	7	2	2	2	7	7	6	3	3	2	4	4	4
Turkey	7	7	6	0	0	0	6	7	5	4	5	3	4	4	3
Vanuatu	7	5	8	6	4	7	5	3	7				5	3	7
Viet Nam	7	7	6	4	5	3	3	3	2	6	7	5	5	5	4
Cambodia	6	6	6				0	0	0	6	6	6	4	4	4
Chile	6	6	5	0	0	0	5	5	5	4	4	3	4	4	4
Dem People's Rep of Korea	6	6	5	3	3	3	0	0	0	6	6	5	5	5	4
Dominica	6	4	8	3	1	5							6	4	8
Ethiopia	6	6	5	0	0	0	4	5	3	4	5	3	5	6	4
Fiji	6	5	7	5	4	6	1	1	1				5	4	6
Haiti	6	6	6	6	6	6	1	1	1	4	4	4	5	5	5
Honduras	6	5	6	3	3	3	5	5	5	4	4	4	5	4	5
Kyrgyzstan	6	6	6	0	0	0	6	6	6	4	4	4	3	3	3
Lao People's Democratic Republic	6	6	6	4	4	4	2	2	2	5	5	5	5	4	5
Madagascar	6	6	6	6	6	6	1	1	1	4	4	4	5	5	4
Mexico	6	7	5	4	5	3	5	6	4	4	5	3	4	5	3
Mozambique	6	6	5	5	5	5	3	3	2	4	4	4	4	4	4
Nepal	6	6	6	0	0	0	6	6	5	5	4	6	6	6	5
Nicaragua	6	5	6	4	3	4	4	4	4	3	4	5	4	5	4
Papua New Guinea	6	6	6	0	0	0	6	5	6	4	3	4	6	5	6
Sao Tome and Principe	6	4	7	0	0	0							6	4	7
Sierra Leone	6	5	6	0	0	0	0	0	0	4	4	4	5	5	5
Solomon islands	6	5	7	4	2	5	6	4	7				6	4	7
Sudan	6	6	5	0	0	0	6	6	5	6	6	5	3	3	2
Tajikistan	6	6	6	0	0	0	6	5	6	5	4	5	4	3	4
Timor-Leste	6	5	7	0	0	0	5	4	6	4	3	4	5	4	6
Uganda	6	6	6	0	0	0	6	6	5	4	4	3	4	4	3
United States of America	6	7	4	3	4	2	6	7	4	3	4	1	3	4	1
Venezuela	6	6	5	1	1	1	5	5	4	4	4	4	4	4	3

Country/Territory Name	MRI multi	MRI multi absolute	MRI multi relative	Tropical Cyclones	Tropical Cyclones abs.	Tropical Cyclones rel.	Earthquakes	Earthquakes absolute	Earthquakes relative	Floods	Floods absolute	Floods relative	Landslides	Landslides absolute	Landslides relative
Argentina	5	5	4	0	0	0	4	5	3	4	5	3	3	4	2
Azerbaijan	5	4	5	0	0	0	2	2	2	4	4	4	4	3	4
Belize	5	3	6	4	2	5				4	2	5	5	3	6
Bhutan	5	4	6	0	0	0	3	2	3	5	4	5	5	4	5
Bolivia	5	5	5	0	0	0	4	4	4	4	4	4	4	4	4
Bosnia and Herzegovina	5	4	5	0	0	0	2	2	2	4	4	4	4	4	4
Brazil	5	6	3	2	2	1	0	0	0	4	5	3	4	5	2
Burundi	5	4	5	0	0	0	1	1	0	4	3	4	4	4	4
Cameroon	5	5	5	0	0	0	0	0	0	4	4	4	5	5	4
Cape Verde	5	3	6										5	3	6
Central African Republic	5	4	5	0	0	0	0	0	0	5	4	5	4	3	4
Chad	5	5	5	0	0	0				5	5	5	3	3	3
Congo	5	4	5	0	0	0	0	0	0	4	4	4	4	3	4
Côte d'Ivoire	5	5	4	0	0	0				5	5	4	4	4	3
Croatia	5	4	5	0	0	0	3	2	3	4	3	4	4	3	4
Cuba	5	5	5	4	4	4	1	1	0	4	4	4	4	4	4
Djibouti	5	4	6				5	4	6	2	1	3			
Egypt	5	6	4	0	0	0	3	4	2	5	6	4			
Equatorial Guinea	5	3	6	0	0	0	0	0	0				5	3	6
Georgia	5	5	5	0	0	0	3	3	3	5	4	5	5	4	5
Greece	5	5	5	0	0	0	5	5	5	2	2	2	4	4	4
Guinea	5	5	5	0	0	0	3	3	3	4	4	4	4	4	4
Iraq	5	5	4	0	0	0	1	1	0	5	5	4	3	3	2
Italy	5	5	4	0	0	0	5	5	4	3	4	2	4	4	3
Jamaica	5	4	5	4	3	4	2	1	2				5	4	5
Kazakhstan	5	5	4	0	0	0	1	1	0	5	5	4	2	2	1
Kenya	5	5	4	0	0	0	0	0	0	4	4	3	5	5	4
Lebanon	5	4	5	0	0	0	1	1	1	3	3	3	5	4	5
Liberia	5	4	5	0	0	0				4	3	4	4	3	4
Malawi	5	5	5	0	0	0	3	3	3	4	4	3	4	4	4
Malaysia	5	5	4	0	0	0	1	1	0	4	4	4	4	4	4
Mauritius	5	4	6	4	3	5							5	4	6
Montenegro	5	4	6				2	1	2	4	2	5	5	4	6
Morocco	5	5	4	2	2	2	5	5	4	4	4	3	0	0	0
New Caledonia	5	3	6	5	3	6							5	3	6
New Zealand	5	4	5	3	2	3	2	1	2	3	3	3	4	3	4
Nigeria	5	6	4	0	0	0	0	0	0	5	6	3	4	5	3
Panama	5	4	5				4	3	4	3	2	3	5	4	5
Paraguay	5	4	5	0	0	0	0	0	0	4	4	4	4	4	4
Republic of Korea	5	5	4	3	4	2	0	0	0	4	5	3	4	4	3
Russian Federation	5	6	4	0	0	0	3	4	2	5	6	3	2	3	1
Rwanda	5	5	5	0	0	0	5	5	5	4	4	4	4	4	4
Saint Kitts and Nevis	5	2	7	5	2	7	2	1	3						
Saint Lucia	5	3	7										5	3	7
Samoa	5	3	6	5	3	6									
Serbia	5	5	5	0	0	0	5	5	5	4	4	4	3	3	3
Somalia	5	5	5	0	0	0	1	1	0	5	5	5			
Sri Lanka	5	5	4	3	3	2				4	4	4	4	4	3
Syrian Arab Republic	5	5	5	0	0	0	0	0	0	5	5	4	4	4	3
Thailand	5	6	4	2	2	1	1	1	0	5	6	4	3	4	2
Togo	5	4	5	0	0	0				4	4	4	4	3	4
Turkmenistan	5	5	5	0	0	0	1	1	1	5	4	5	0	0	0
United Republic of Tanzania	5	6	4	0	0	0	5	5	4	4	4	3	5	5	4
Zimbabwe	5	5	5	0	0	0	1	1	0	4	4	4	3	3	2
Angola	4	4	4	0	0	0	0	0	0	4	4	4	4	4	4
Antigua and Barbuda	4	2	6	4	2	6	3	1	4						
Australia	4	4	4	4	4	3	3	3	2	3	3	2	3	3	2
Austria	4	4	4	0	0	0	1	1	1	3	3	3	3	3	3
Bahamas	4	2	6	4	2	5									
Belarus	4	4	4	0	0	0				4	4	4			
Benin	4	4	4	0	0	0				4	4	4	4	4	4
Botswana	4	3	4	0	0	0				4	3	4			
Brunei Darussalam	4	3	5	0	0	0							4	3	5
Bulgaria	4	3	4	0	0	0	1	1	0	3	3	3	3	3	3
Burkina Faso	4	4	4	0	0	0				4	4	4	2	3	1
Canada	4	4	3	0	0	0	1	1	0	2	2	1	3	3	2

Country/Territory Name	MRI multi	MRI multi abs.	MRI multi rel.	Tropical Cyclones	Tropical Cyclones abs.	Tropical Cyclones rel.	Earthquakes	Earthquakes absolute	Earthquakes relative	Floods	Floods absolute	Floods relative	Landslides	Landslides absolute	Landslides relative
Czech Republic	4	4	4	0	0	0	0	0	0	3	3	3	3	3	3
Eritrea	4	4	4	0	0	0	0	0	0	4	3	4	4	3	4
France	4	4	3	0	0	0	0	0	0	4	4	3	3	3	2
French Guiana	4	2	5	0	0	0				4	2	5	0	0	0
Gabon	4	3	5	0	0	0	0	0	0	4	3	5	4	3	4
Gambia	4	3	5	0	0	0				4	3	4	4	3	4
Germany	4	4	3	0	0	0	1	1	0	3	4	2	2	3	1
Ghana	4	4	3	0	0	0				4	4	3	3	3	2
Guadeloupe	4	2	5	3	2	4	2	1	2				0	0	0
Guam	4	2	5	3	1	5	3	1	4				0	0	0
Guinea-Bissau	4	3	5	0	0	0	0	0	0	4	3	4	4	3	4
Guyana	4	3	5	0	0	0				4	3	5	4	3	4
Hong Kong	4	4	4										4	4	4
Iceland	4	2	5	0	0	0	0	0	0				4	3	5
Ireland	4	3	4	0	0	0				3	2	3	3	3	3
Israel	4	3	4	0	0	0	0	0	0	3	3	3	3	3	3
Lesotho	4	3	4	0	0	0				4	3	4	4	3	4
Liechtenstein	4	1	6	0	0	0							5	3	6
Lithuania	4	3	4	0	0	0				4	3	4			
Mali	4	4	4	0	0	0				4	4	4	3	3	2
Mauritania	4	3	4	0	0	0				4	3	4			
Micronesia (Federated States of)	4	2	6	4	2	6	1	0	1						
Moldova, Republic of	4	4	4	0	0	0	1	1	1	4	4	4	3	3	2
Monaco	4	1	6	0	0	0							4	2	6
Mongolia	4	3	4	0	0	0	1	1	0	4	3	4	0	0	0
Montserrat	4	1	6				4	1	6						
Namibia	4	3	5	0	0	0	0	0	0	4	3	4	4	3	4
Netherlands Antilles	4	2	5	4	2	6	0	0	0						
Niger	4	4	4	0	0	0				4	4	4	3	3	2
Northern Mariana Islands	4	2	6	4	1	6	3	1	4						
Palau	4	1	6	4	1	6									
Poland	4	4	3	0	0	0	0	0	0	4	4	3	2	3	1
Portugal	4	4	4	0	0	0	1	1	0	2	2	2	4	3	4
Puerto Rico	4	4	4	3	3	3	0	0	0	2	1	2	4	3	4
Saint Vincent and the Grenadines	4	2	6	4	2	6									
San Marino	4	1	6	0	0	0							4	2	6
Senegal	4	4	4	0	0	0	0	0	0	4	4	4			
Slovakia	4	3	4	0	0	0				4	3	4	3	3	2
Slovenia	4	3	5	0	0	0	2	1	2	3	2	4	4	3	4
South Africa	4	4	3	0	0	0	1	2	0	3	4	2	3	3	2
Spain	4	4	3	0	0	0	1	1	0	3	4	2	3	3	2
Suriname	4	2	5	0	0	0				4	2	5			
Swaziland	4	3	5	0	0	0	0	0	0	4	3	5	3	2	3
Switzerland	4	4	4	0	0	0	0	0	0	3	3	3	4	3	4
The former Yugoslav Republic of Macedonia	4	3	5	0	0	0	1	1	1	4	3	4	4	3	4
Tonga	4	2	6	4	2	6	3	1	4						
Trinidad and Tobago	4	3	5				3	2	4				4	3	5
Tunisia	4	4	4	0	0	0	0	0	0	4	4	4	4	3	3
Ukraine	4	5	3	0	0	0	1	1	0	4	5	3	2	3	1
Uruguay	4	3	4	0	0	0				4	3	4	3	3	3
Yemen	4	4	4	0	0	0	3	3	2	1	1	1	4	4	4
Zambia	4	4	4	0	0	0	1	1	0	4	4	4	3	3	3
Anguilla	3	1	5	3	1	5	0	0	0						
Barbados	3	1	4	3	1	4									
Belgium	3	3	3	0	0	0	0	0	0	3	3	3			
Bermuda	3	1	5	3	1	5									
British Virgin Islands	3	1	4	3	1	4	0	0	0					</	